

**Table 1: Ground Water Well Usage within the San Mateo Creek Basin**

<b>GROUND WATER USAGE</b>		<b>TOTALS</b>
<b>Consumptive</b>		2,213
	Single domestic wells <sup>1</sup>	203
	Multiple domestic and community wells <sup>1</sup>	10
	Municipal water supply wells <sup>2</sup>	2000
<b>Irrigation, sanitary, industrial, and stock wells</b>		241
<b>Other well usages</b>	Including dewatering, exploration, mining, milling, oil, monitoring, no recorded use of right, observation, prospecting, construction, and no documented usage category	79

**Notes:**

<sup>1</sup> New Mexico Office of the State Engineer (OSE), 2011, New Mexico Water Rights Reporting System Database (Ref. 25).

<sup>2</sup> New Mexico Drinking Water Bureau, Safe Drinking Water Information System (SDWIS) Database.  
The Village of Milan Community Water System serves an estimated population of 2,000 people. There are three active water supply wells.

**Table 2: Laboratory Analyses for General Chemistry, Total and Dissolved Metals, and Radiochemistry**

Laboratory Analyses	General Geochemistry	Metals (total-unfiltered & dissolved-filtered) <sup>1</sup>	Radionuclides (total-unfiltered) <sup>2</sup>
Analytical Methods	EPA 160.1, 310.1 EPA 300.0, 340.2 EPA 353.2	ISM01.3 ICP-MS; SW-846/6010B; 200.8	EPA 900 series; 903.1; 904; 907; 910; ASTM D5072-92 for Radon
Analytes	TDS, HCO <sub>3</sub> , CO <sub>3</sub> SO <sub>4</sub> , Cl, F NO <sub>3</sub> +NO <sub>2</sub> Ca, K, Mg, Na	Al, As, Cu, Fe, Pb, Mo, Mn, Se, U (includes Ca, Cl, K, Mg, Na)	Gross Alpha, Ra-226, Ra-228, Th-227, Th-228, Th-230, Th-232, U-234, U-235, U-238 Rn(gas)

**Notes:**

<sup>1</sup> U.S. Environmental Protection Agency, Risk and Site Assessment Section (6SF-TR), 2013. Draft Human Health Risk Assessment, Homestake Mining Co. Superfund Site, Milan, Cibola County, New Mexico (Ref. 21)

<sup>2</sup> New Mexico Environment Department, Ground Water Quality Bureau, Superfund Oversight Section, 2007. Summary report on 2005-2006 residential well sampling within the vicinity of the Homestake Mining Company Uranium Mill Superfund Site, CERCLIS # NMD007860935, Cibola County, New Mexico (Ref 11)





Analyte	CAS.NO	Units	National Primary Drinking Water Standard Maximum Contaminant Level (MCL)	New Mexico Water Quality Control Commission (NMWQCC)	SMC-13 4/2/2009	LSM-34 10/7/2014	SMC-10 3/30/2009	LSM-35 10/7/2014	SMC-25 3/30/2009	LSM-56 10/8/2014	SMC-20 3/31/2009	LSM-61 1/7/2015
<b>Dissolved Metals</b>												
Calcium	7440-70-2	mg/L	NA	NP	389	362	567	143	64.9	478	92.3	85
Iron	7439-89-6	mg/L	NA	1	0.025	0.075 U	0.025	0.896	0.025	0.05 U	0.025	0.05 U
Magnesium	7439-95-4	mg/L	NA	NP	73.7	70.1	149	30.5	8.26	132	15.8	15
Manganese	7439-96-5	mg/L	NA	0.2	0.0115	0.015 U	0.005	0.0691	0.005	0.01 U	0.057	0.062
Potassium	7440-09-7	mg/L	NA	NP	8.44	14.8 J	6.95	4.68 J	1.01	11.1 J	5.9	5
Selenium	7782-49-2	mg/L	NA	0.05	<b>0.618</b>	<b>0.658</b>	0.0321	0.0229	0.0132	0.0205	<b>0.0736</b>	<b>0.064</b>
Sodium	7440-23-5	mg/L	NA	NP	355	483 J	261	421 J	102	339 J	67.9	58
Uranium	7440-61-1	mg/L	NA	0.03	<b>0.24</b>	<b>0.238</b>	<b>0.0309</b>	0.0065	0.0206	0.0213	<b>0.0639</b>	<b>0.06</b>

General Chemistry												
Estimated Bicarbonate	Bicarbonate	mg/L	NP	NP	180	526	170	332	181	0	260	259
Carbonate	Carbonate	mg/L	NP	NP	10	NA	10	NA	10	NA	10	0
Chloride	16887-00-6	mg/L	NP	250	59	49	47	64	26	45	15	16
Fluoride	16984-48-8	mg/L	NP	1.6	0.5	0.25 U	0.56	0.25 U	1.4	0.51	0.25	0.14 A
Nitrate+Nitrite as N	14797-65-0	mg/L	1	NP	18.6	17	21.2	1.04	5.7	17.2	1.08	1.16
Sulfate	14808-79-8	mg/L	250	600	1610	1670	2110	994	144	2380	96	100
Total Dissolved Solids	TDS	mg/L	500	1000	2710	2940	3380	1900	504	3430	504	444
Total Metals												
Arsenic	7440-38-2	mg/L	0.01	NA	0.0377	0.0349	0.002U	0.002 U	0.0112	0.002 U	0.005	0.003
Selenium	7782-49-2	mg/L	0.05	NA	0.604	0.654	0.0314	0.0249	0.0133	0.02	0.074	0.057
Uranium	7440-61-1	mg/L	0.03	NA	0.24	0.24	0.0305	0.0066	0.0215	0.0208	0.066	0.054
Radiological												
Gross Alpha w/ Am-241 Reference	12587-46-1	pCi/L	15	NP	NA	87.8 (+/- 5)	NA	3.9 (+/- 0.8)	NA	8.8 (+/- 1.3)	NA	36.3 (+/- 3.7)
Gross Alpha w/ U-nat Reference	12587-46-1	pCi/L	15	NP	NA	116.9 (+/- 6.6)	NA	5.1 (+/- 1)	NA	12.2 (+/- 1.9)	NA	46.9 (+/- 4.7)
U234, by Alpha Spec	13966-29-5	pCi/L	NP	NP	75.8 (+/- 6.2)	75.2 (+/- 2.06)	0.1 (+/- 0.09)	2.3 (+/- 0.12)	NA	11.3 (+/- 0.41)	30.4 (+/- 2.7)	28.9 (+/- 0.8)
U238, by Alpha Spec	7440-61-1	pCi/L	10	NP	64.3 (+/- 5.3)	60.2 (+/- 1.72)	0.04 (+/- 0.06)	1.6 (+/- 0.1)	NA	6.1 (+/- 0.26)	17.4 (+/- 1.7)	18.3 (+/- 0.52)
Uranium, Mass Concentration	ug/L	ug/L	30	NP	NA	210 (+/- 21)	NA	6 (+/- 0.6)	NA	21 (+/- 2.1)	NA	61 (+/- 6.1)

Notes:

U - Analyte not detected

NA - Not Applicable

NP - Not Published

J - The identification of the analyte is acceptable; the reported value is an estimate

A - This sample was extracted at a single acid pH.

mg/L - milligrams per Liter. Milligrams per Liter are equivalent to parts per million.

ug/L - micrograms/Liter. Micrograms per Liter are equivalent to parts per billion.

pCi/L - picocuries per Liter

Maximum Contaminant Levels (MCLs) are standards that are set by the United States Environmental

Protection Agency (EPA) for drinking water quality.

An MCL is the legal threshold limit on the amount of a substance that is allowed in public water systems under the Safe Drinking Water Act.

Alkalinity and Bicarbonate estimated by Anion and Cation Balance Calculation

New Mexico Water Quality Control Commission Standard (NWQCC) Health-based standards applicable to groundwater with less than 10,000 mg/L Total Dissolved Solids (TDS). For metals contaminants, these standards apply to dissolved metals.

NWQCC for Radioactivity: Combined Radium-226 and Radium-228 standard is 30 pCi/L.